

DESCRIPTIONS OF SOME

RARE NEW SOUTH AUSTRALIAN LEPIDOPTERA.

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Smerinthus (?) *Wayii*, *spec. nov.*

This rather large moth was captured in the evening of February 15th, 1882. Being attracted by the light of the lamp, it entered my room, making its presence known by the very loud surring noise of its darting, erratic flight, peculiar to *Sphingidæ*.

Examining it closely one finds that it unites affinities belonging to widely different families—thus, the form of its body conical, smooth, and ending in a point; the small head and eyes; large, hairy, and jointed palpi; and the moderately-long spiral tongue; also the general form of the anterior wings, together with its habit of flight, relate it to genus *Smerinthus*, of the *Sphingidæ*; while the long thin antennæ (though in other respects like those of *Smerinthus*), and the great width (and length) of the posterior wings place it in relation to the family of *Oecneria*, some of which, like *O. monacha*, likewise show the peculiar form of the abdomen. Finally, the coloration of this moth is that common to *Geometridæ*, from which it differs in most other points, notable the very heavy body.

Only one specimen has as yet been seen, thus nothing is known about its habits or transformation.

Considering, under the circumstances stated, that this moth is new, I beg leave to name it after His Honor the Chief Justice, and distinguished President of the Royal Society of South Australia, who so assiduously promotes and patronises science in our province.

DESCRIPTION.—Head small, same colour as body, &c. Eyes not large, blackish, with silvery lustre. Antennæ thin, pointed, about half the length of body; silvery white; fringe bristles minute, greyish-ochre. Wings strong, proportionally wide; when at rest extended, but obliquely elevated; colour light ochreous-brown, irregularly sprinkled with minute blackish dots; a straight, narrow brown bar extends from near the extremity of anterior wings diagonally to near the middle of interior margin, thence extending across the posterior wings to the middle of their interior margin; another, less distinct, curved band, concave towards base, crosses anterior wings

half-way between base and the long bar measured along middle of wing. A small silvery white lunar spot with black edge is situated between the two bars and crossed by the fourth rib; a similar one, but smaller still, and close to the bar, occurs between the third and fourth rib on the posterior wing. The underside of both pairs of wings is similarly coloured, but paler, with the lunar spots, but without the bars; the ribs are but faintly visible, and of lighter tint than the rest. The anterior margin of first pair is strong and very straight, the extremity forming a sharp projection where joining the outer margin, which is distinctly scolloped, but scarcely fringed; the interior margin is subconvex, the basal part thickly fringed. The anterior margin of posterior pair is convex, and somewhat longer than the inner, which is straight; the outer margin is rounded and lightly scolloped; the wings extend nearly to end of abdomen.

The body is of the same colour as the wings; the thorax is covered above with long hair; the abdomen is conical, quite smooth, the scales being very small and adherent, and terminating in an attenuated point. The legs are weak, bare, smooth; colour a light silvery ochreous tint, covered with numerous minute, black dots; femurs of fore legs almost cylindrical; those of middle pair with two, and the hind legs with four spurs. Only one specimen seen.

	Inches.
Length of body	$1\frac{1}{8}$
Span of wings	$2\frac{7}{8}$
Diameter of thorax	$\frac{1}{4}$

Lithosia rubratra, *spec. nov.*

This is one of the few gaudy-coloured moths of South Australia, which are so rare here. Three specimens—one male and two females—were captured; the first in a wooded gully near Cherry Gardens on November 9th, 1881, late in the afternoon; the others a few days later near the Almanda Mine, Scott's Creek. Its flight is weak and slow, more a fluttering, and of short duration; when resting (which they do on dead branches, especially on such as have been blackened by fire, or covered with lichens) they fold the wings, like some *Tineadæ*, but do not roll them. Not being aware of any previous description, I beg to attach to it the name *Lithosia rubratra* (the red and black *Lithosia*) provisionally, as its general appearance agrees best with that genus.

DESCRIPTION.—Rather small; colour bright red or crimson and black. The basal half of both pairs of wings, as well as a narrow band and fringe along their outer margins, is bright red or crimson; also the head, collar and the last segment of the abdomen; the remainder is black, this tint forming a broad

bar across the distal end of the wings. The under side is similarly coloured, but somewhat paler, the posterior ones showing some yellowish streaks amongst the red. The posterior part of thorax and the two first abdominal segments (much wider than the others) are brownish. The legs are unequal in length, the first pair being only about half as long as the last; the middle pair being intermediate. The two first pairs of legs are wholly black; the former of the last is dark red, and the foot-joints tinged with the same. Spurs are absent from the front legs; the median pair has one, and the hind legs have two near the middle and one at the end of the femur. Claws are very minute or absent. Antennæ two-thirds of length of body; sealed on upper and inner margin of the eyes; compressed; the basal joint large, sub-globular; other joints minute, numerous; furnished with short setæ. The female is a little larger and brighter coloured than the male. Length of body three-eighths to half inch; span of wing, $1\frac{3}{16}$ to $1\frac{5}{16}$ inch.

Thryphæna (?) *tineæformis*, *spec. nov.*

This day-flying moth is, in the whole, not so rare as the foregoing Lepidoptera, it being found in moderate numbers in the Tertiary scrubs, and coming sometimes in the early parts of sultry evening into the room, being attracted, like many others, to the light. The above provisional name has been adopted to denote that, though the very marked coloration, &c., is that distinctive of the genus *Thryphæna* (Family Agrotidae) yet the slender legs and long palpi establish relationship with the *Tineadæ*.

DESCRIPTION.—Colour brown, orange, and black. Body rather slender, somewhat compressed conical. Anterior wings rather narrow, triangular; colour brown; a broad whitish indistinct bar near its extremity; a larger and a smaller black spot on first rib near middle, reproduced on the under side; the latter light yellow, except frontal margin, tip and outer margin, which are light blackish brown, with a narrow light band along the latter. Posterior wings orange yellow; a broad black band from upper angle to last rib; but one underside light yellow; band reproduced but fainter; fringe narrow, light yellowish. Body light brown above, silvery white below; legs white, very long and thin; forelegs with one pair of spurs; middle and hind legs with two very unequal pairs; one spur of each being very long, the other minute. Head projecting, neck long; these and the thorax dark brown; eyes large, projecting, black; antennæ long, slender; palpi long, slender, brown. The female is a little larger and brighter-coloured than the male.

Length of body— $\frac{1}{2}$ in. to $\frac{5}{8}$ in. Span of wings— $1\frac{1}{4}$ to $1\frac{3}{8}$ in.

Locality—Clarendon.